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# Vine Lines

Fresno County

February 2011

**Stephen J. Vasquez,**
**Viticulture Farm Advisor**

## In This Issue



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# UC Davis Toasts New Sustainable Winery, Brewery and Foods Complex

Joined by hundreds of friends, supporters and alumni, the University of California, Davis, officially opened the doors on January 28th to the world's most environmentally sophisticated facility for making wine, brewing beer and processing foods. The new, 34,000-square-foot teaching and research complex, located within UC Davis' Robert Mondavi Institute for Wine and Food Science, was financed entirely by private philanthropy — no state or federal funds were used. The campus received more than $20 million in private support to construct and equip the complex.

It is the first such building to receive LEED Platinum certification, the highest rating for environmental design and construction awarded by the U.S. Green Building Council. (LEED stands for Leadership in Energy and Environmental Design.) Campus leaders also hailed the new complex for its advanced technology, including the world's first wireless wine fermentation system.

"We are so very proud of this state-of-the-art teaching and research complex," said UC Davis Chancellor Linda P.B. Katehi. "It is

a crown jewel for UC Davis. And it is proof of our enduring commitment to wine, beer, food, and agriculture, overall — here in our region and globally. "This facility really embodies everything that UC Davis stands for today. And at the same time, it is a symbol of where we are headed," Katehi said. "We want to be a driver of innovation — and a partner in economic development — to improve our economy and quality of life. We want to be stewards of our natural resources and a model of sustainability. This facility really does it all and will do it all for many years to come."

Neal Van Alfen, dean of the UC Davis College of Agricultural and Environmental Sciences, said: "This research complex is a landmark for UC Davis and the wine, brewing and food industries in

*(Continued on page 3)*

# Preliminary Grape Crush Report Released

California's 2010 crush totaled 3,980,229 tons, down 3 percent from the 2009 crush of 4,095,297 tons. Red wine varieties accounted for the largest share of all grapes crushed, at 2,047,766 tons, down 1 percent from 2009. The 2010 white wine variety crush totaled 1,535,133 tons, down 6 percent from 2009. Tons crushed of raisin type varieties totaled 273,577, down 11 percent from 2009, and tons crushed of table type varieties totaled 123,753, up 46 percent from 2009.

The 2010 average price of all varieties was $543/T, down 5 percent from 2009. Average prices for the 2010 crop by type were as follows: red wine grapes, $625/T, down 7 percent from 2009; white wine grapes, $500/T, down 7 percent from 2009; raisin grapes, $209/T, up 22 percent; and table grapes, $173/T, up 21 percent.

In 2010, Chardonnay accounted for the largest percentage of the total crush volume with 16.4 percent. Cabernet Sauvignon accounted for the second leading percentage of crush with 11.2 percent of the total crush. The next eight highest percentages of grapes crushed were all wine varieties, with the exception of Thompson Seedless.

Grapes produced in District 4 (Napa County) received the highest average price of $3,243 per ton, down 5 percent from 2009. District 3 (Sonoma and Marin counties) received the second highest return of $2,008, down 8 percent from 2009. The 2010 Chardonnay price of $715/T was down 6 percent from 2009, and the Cabernet Sauvignon price of $1,024/T was down 5 percent from 2009. The 2010 average price for Zinfandel was $441/T, down 5 percent from 2009, while the Merlot average price was down 2 percent from 2009 at $612 per ton.

This preliminary report includes all grape tonnage crushed during the 2010 season, as well as purchased tonnage and pricing information with final prices prior to January 10, 2011.

**The Final Grape Crush Report will be available March 10, 2011.**

The entire Grape Crush Report is available online.

# New Leadership

The *San Joaquin Valley Viticulture Technical Group* (SJV-VTG) has new leadership. The SJV-VTG is a collaborative organization that includes industry and university professionals representing the grape industries. During the year, the SJV-VTG holds educational forums that feature technical discussions on current research and industry developments.

Karl Lehman, the new president, is a fourth generation grape grower and graduate of CSU Fresno. He currently works for Allied Grape Growers as the south San Joaquin Valley grower relations representative. Karl serves as the Fresno County Farm Bureau grape commodity chair and on the State Wine Grape Inspection Board as a grower alternate representative. He can be reached at (559)240-7263.

Long-time board member Kip Green is serving as vice president. A graduate of CSU Fresno with an MS degree in Plant Science, Kip started his career in the agricultural chemical research industry. With over 20 years experience in viticulture, he joined Britz Farming as a Pest Control Advisor–focused on almond and grape management. He is currently serving as a member of the American Vineyard Foundation–Research Proposal Review committee.

The SJV-VTG Board would like to thank Ron Brase and Mike Thomas for their service as President and Vice President, respectively.

To learn more about the SJV-VTG meeting topics or organization call (559) 661-5539.

## Winery Brewery and Foods Complex

*(Continued from page 1)*

California. It will allow us to conduct cutting-edge research and train the next generation of food-industry leaders." Van Alfen also announced that, among the commitments from private donors, $3 million was recently pledged to UC Davis by Jess Jackson and Barbara R. Banke of Jackson Family Wines to construct the Jess S. Jackson Sustainable Winery Building. That building, planned for completion in 2013, will house the technology needed to maximize the environmental capabilities of the adjacent new winery.

For example, the sustainable winery building will enable the teaching and research winery to demonstrate how a winery can operate on rainwater when it captures, filters and reuses that water many times. The planned building also will house equipment needed to sequester the carbon dioxide captured from the winery's fermentation system, thus preventing damage to the atmosphere. This is expected to make it the first winery to have a net-zero carbon footprint, meaning that it captures and sequesters at least as much carbon dioxide as it produces.

Other speakers during the grand opening ceremony were U.S. Rep. Mike Thompson (D-Napa); Jerry Lohr of J. Lohr Vineyards & Wines; Doug Muhleman, an alumnus and trustee of the UC Davis Foundation; James Seiber, chair of the UC Davis Department of Food Science and Technology; and Andrew Waterhouse, chair of the UC Davis Department of Viticulture and Enology. Also present for the event were Margrit Mondavi, representatives from Anheuser-Busch InBev, and leaders from the California wine industry.

**About the New Complex**

The new one-story complex is constructed in two adjoining wings and is adjacent to a new 12-acre teaching and research vineyard.

The south wing of the complex is home to the August A. Busch III Brewing and Food Science Laboratory, which includes the Anheuser-Busch InBev Brewery; the California Processing Tomato Industry Pilot Plant for processing a variety of foods; and the Milk Processing Laboratory. The complex's north wing houses the new Department of Viticulture and Enology Teaching and Research Winery. Construction was completed in July, and wine-grape crush and brewing began there in September 2010.

**LEED Design**

In December, the U.S. Green Building Council awarded LEED Platinum certification to the complex, which is the second UC Davis building to complete the certification process. The new winery, brewery and food-processing complex was designed to serve as a test bed for production processes and techniques that conserve water, energy and other vital resources. Its environmentally friendly features include onsite solar power generation and a large-capacity system for capturing rainwater and conserving processing water. The stored rainwater will be used for landscaping and toilets, per LEED specifications.

The planned Jess S. Jackson Sustainable Winery Building will provide an automated system to clean barrels, tanks and fermentors. The system will make it possible to reuse 90 percent of the captured rainwater, serving as a demonstration of how businesses with limited water can become self-sufficient. Plans call for the new facility to eventually operate independent of the main campus water supply.

The new winery also has been designed to capture carbon dioxide, a natural byproduct of fermentation, from a port in each of the new fermentors. An innovative process will be used to remove the carbon dioxide from the winery, reducing the building's energy requirements for air quality and temperature control. The new sustainable winery building will make it possible to sequester the captured carbon dioxide so that it will not contribute to global warming. Other environmentally responsible features include maximum use of natural light, rooftop photovoltaic cells to provide all of the facility's power at peak load, new food-processing equipment that minimizes energy and water requirements, use of recycled glass in the flooring, interior paneling

*(Continued on page 5)*

# 2011 Funding to Control EVGM in California

The U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) announced that it has released $16.9 million in emergency funding to prevent the spread of European grapevine moth (EGVM) in California.

"With this additional funding, our critical work with our partners to protect California's grape industries will continue without interruption in 2011," said Cindy Smith, APHIS administrator. "Our ongoing, intensive survey and regulatory activities in the state are reducing the spread of the pest and are preventing potentially extensive crop damage. We know that this issue is of great interest to the California Congressional delegation, and we appreciate the importance that they place on protecting U.S. agriculture from plant pest."

APHIS, the California Department of Food and Agriculture (CDFA), county officials, affected industry and the University of California Cooperative Extension are cooperating closely to conduct response activities. These efforts include outreach, surveys, quarantine enforcement and grower-led treatments. APHIS also provides scientific support by hosting international technical working groups to review the most current data and provide science-based recommendations for survey and treatment protocols.

EGVM (*Lobesia botrana*) is a significant pest of grapes. The moth is found in Europe, the Mediterranean, southern Russia, Japan, the Middle East, Near East and northern and western Africa. Since 1986, surveys for this pest have been conducted throughout the United States without detections.


However, in the fall of 2009, EGVM was found in Napa County California, its first detection both in the United States and North America. To date, APHIS and CDFA have established quarantine areas in all or portions of Fresno, Mendocino, Merced, Napa, San Joaquin, Santa Clara, Solano and Sonoma counties to prevent the spread of EGVM.

**Fresno County**

*Lobesia botrana*, continues to be a concern for Fresno County agriculture. Grape growers should remain vigilant and continue preventative insecticide applications during the 2011 season focused on the first generation. Eradicating this damaging invasive pest and ending the quarantine is the goal. Growers should choose insecticide applications based on University of California guidelines and degree day modeling for European grapevine moth (EGVM). Current quarantine restrictions will remain in place until the pest can be declared eradicated from Fresno County.

Cooperation from growers located in the quarantine area was excellent during the 2010 season as reported by Ken Schneider, EVGM treatment coordinator for the Fresno County quarantine area. Ken helped growers find products that give long residual management against EGVM but minimize time between applications and harvest. Growers with questions or concerns should call him to discuss options for the 2011 season.

**Ken Schneider**
EGVM Treatment Coordinator
Office: 559-787-3700
Cell: 559-259-0335
Email: kens@alluvialag.com

Continuing pesticide treatments are essential to eradicating EGVM from Fresno County. The swift and targeted actions that growers have taken thus far within the quarantine area are protecting the regions agriculture industry now and future harvest. The sooner eradication can be declared means quarantine restrictions can be lifted and fruit can move freely to markets worldwide.

More information about EGVM can be found online.

## Winery, Brewery and Foods Complex

*(Continued from page 3)*

recycled from a 1928 wooden aqueduct, and use of lumber harvested from sustainably certified forest operations.

**High-tech processing systems**

The facility also includes what is believed to be the world's first wireless wine-fermentation system, a multimillion dollar assembly of 152 wireless grape fermentors, designed, fabricated and donated by a team of research engineers led by T.J. Rodgers, the founder, president and chief executive officer of San Jose, Calif.-based Cypress Semiconductor. Each of the 200-liter, electropolished, stainless steel fermentors is individually equipped for automated control of temperature and the "pump-over" process, controlling two of the most important factors in determining final wine characteristics and quality.

The new fermentor sensors frequently and precisely extract and transmit sugar-concentration data from white and red fermentations across a wireless network. Data from the sensors can be generated every 15 minutes with a precision of 0.25 Brix, a measure of sugar content. Just completed, it is one of the largest wireless networks in any fermentation facility in the world.

Additionally, the new brewery will provide a showcase for the latest in brewing technology, as well as a sophisticated laboratory for conducting research and training students in the science of brewing. It also is intended to provide commercial brewers and suppliers with a small-scale facility in which they can test new recipes or processes.

**Donors make vision a reality**

Dozens of private donors contributed funds to make the new complex a reality, beginning with a $5 million contribution in 2001 from the late winemaker Robert Mondavi, followed in 2002 by a $5 million pledge by the Anheuser-Busch Foundation.

Other major donations were made by Ronald and Diane Miller and by a group of winery partners led by Jess Jackson and Barbara Banke of Kendall-Jackson Wines, and Jerry Lohr of J. Lohr Vineyards and Wines. That group of winery partners secured the funds necessary to design and construct the facility to LEED Platinum standards.

California tomato processors and growers also came together to contribute more than $2.5 million to the food-processing pilot plant, recognizing the important role that the Department of Food Science and Technology has played in the industry and the future potential for training students and conducting research at the new complex. The Woodland, California-based Morning Star Packing Company provided a lead gift of $1 million for the food-processing plant.

In all, more than 150 individuals, alumni, corporations and foundations contributed funds to make the new winery, brewery and food-processing complex a reality. These included major contributions from the Department of Viticulture and Enology's Board of Visitors and Fellows.

More information about the department and the new winery is available online at:

http://wineserver.ucdavis.edu

# H-2A Visa Program for Agricultural Employees

The H-2A temporary agricultural Visa program is a federal program administered by the Department of Labor (DOL) Employment and Training Administration (ETA). The H-2A program establishes a means for agricultural employers who anticipate a shortage of domestic workers to bring nonimmigrant foreign workers to the U.S. to perform agricultural labor or services of a temporary or seasonal nature.

Employers anticipation a shortage of agricultural workers must apply with the Employment Development Department (EDD) at least 60-75 days before the date the job begins. The employer must recruit U.S. workers through EDD and newspapers advertising. Such Recruitment must be at least equivalent to that conducted by non-H-2A agricultural employers in the same or similar crops and area. The employer must agree to recruit and hire U.S. workers who are eligible, able, willing, and available to perform the work offered.

Individuals interested in an H-2A job can go to their local EDD office and ask to speak to an EDD H-2A Specialist. The H-2A Specialist will provide all information about any local H-2A jobs as well as any H-2A jobs throughout the U.S.

Individuals will be asked to register for work with EDD and present information about their work history and authorization to work in the U.S.

Idividuals may also access the EDD's employment website to view all jobs within California at: http://www.caljobs.ca.gov

To view available H-2A jobs throughout the U.S., individuals can visit the DOL's website at: http://icert.doleta.gov

## UC GRAPE DAY

**Tuesday, August 16, 2011**

**7:30a.m. to 12:00p.m**

Kearney Agricultural Center
9240 S. Riverbend Avenue
Parlier, CA 93648

Contact: Matthew Fidelibus
(559)646-6500

Cost: $10/person

Includes:
Meeting, proceedings and refreshments

# Managing Phomopsis Cane and Leafspot

Consideration should be given to your Phomopsis management program with budbreak approaching. Valley growers should consider applying a fungicide to protect young succulent growth prior to spring showers. *Phomopsis viticola* pycnidia will begin producing spores that infect susceptible cultivars such as Thompson Seedless, Flame Seedless, Redglobe, Grenache and others. Timely fungicide applications are paramount to good Phomopsis management.

**Springtime management**

Registered fungicides applied from budbreak through 12" of growth (mid March-May) act as foliar protectants and need to be applied prior to rain events to new growth after budbreak.

Copper/sulfur mixes work as foliar contact protectants when applied before rain events, with additional applications needed after heavy rains and new growth appears. Fungicides from this group should be considered for early season management due to canopy size and costs.

Strobilurin fungicides work as foliar systemics and sustain activity throughout long rain events. Unlike the contact protectants, they have the advantage of not being washed off during a rain event. Care should be taken to rotate the strobilurins with fungicides that are multiple site inhibitors (copper/sulfur). As the canopy continues to grow (4-6"), these fungicides should be considered as replacements for the non-systemic fungicides. Their efficacy during storms lasting more than a day will help protect new susceptible tissue.

More information on Phomopsis can be found at:

http://ucipm.ucdavis.edu/PMG/r302100411.html

# CALENDAR OF EVENTS

***Local Meetings and Events***

***Kearney Grape Day***
August 16, 2011
7:30 a.m. — 12:00 p.m.
Kearney Agricultural Center
9240 S. Riverbend Avenue
Parlier, CA 93648
Contact: Matthew Fidelibus
(559)646-6500
Cost: $10/person

***U.C. Davis University Extension Meetings***

***(800) 752-0881***

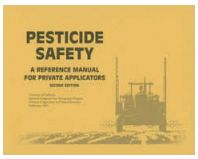
***Everyday Winery Compliance: Record Keeping and Data Mining***
April 28, 2011
9:00 a.m.—4:00 p.m.
Da Vinci Building, 1632 Da Vinci Ct.
Davis, CA
Section: 104VIT206

***Variety Focus: Chardonnay***
May 19, 2011
8:30 a.m. — 5:30 p.m.
Freeborn Hall, North Quad
Davis, CA
Section: 104VIT201

***Managing the Small Vineyard II***
May 7, 2011
9:00 a.m.— 4:00 p.m.
Room 180 Medical Science Building
Davis, CA
Section: 104VIT202

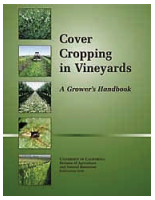
***Varietal Winegrape Production Short Course***
March 1-3, 2011
8:30 a.m. — 5:00 p.m.
Freeborn Hall, North Quad
Davis, CA
Section: 103VIT202

# *Publications from the University of California*




***Pesticide Safety: A Reference Manual for Private Applicators***
ANR Publication 3383
Price - $7.00 + tax and shipping

Updated in 2006, this manual covers information essential for anyone using pesticides on California farms, including growers, managers and employees. The manual covers pesticide labels, worker safety (handlers and fieldworkers), how to mix and apply pesticides, calibration, the hazards of pesticide use including heat related illness, and pesticide emergencies.




***Cover Cropping In Vineyards***
ANR Publication 3338
Price - $20.00 + tax and shipping

This guide features cutting-edge methods for using cover crops to enhance vineyard performance. Based on extensive research, this guide details technical and theoretical information on how cover crops affect vineyards and promote ecological stability.

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